

**SEPARATION
OF
BLEND COMPONENTS**

PM3000984103

**SEPARATION
OF
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PM3000984104

TYPICAL CONCENTRATIONS OF COMPONENTS

Philip Morris

<u>Recon</u>	<u>ES</u>	<u>ET</u>
15% to 20%	0 to 10%	0 to 50%

R. J. Reynolds

<u>Recon</u>	<u>ES</u>	<u>ET</u>
15% to 25%	None	7% to 50%

Brown & Williamson

<u>Recon</u>	<u>ES</u>	<u>ET</u>
11% to 22%	0 to 14%	0 to 14%

Lorillard

<u>Recon</u>	<u>ES</u>	<u>ET</u>
15% to 22%	None	11% to 25%

American

<u>Recon</u>	<u>ES</u>	<u>ET</u>
20% to 25%	0 to 3%	12% to 50

Liggett

<u>Recon</u>	<u>ES</u>	<u>ET</u>
10% to 15%	5% to 13%	20% to 25%

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TWO METHODS OF SEPARATION

Microscopic

- Components from center third of two cigarettes manually separated under microscope
- Fractions isolated and weighed
- Reported as Percent by Weight
- Routine method of analysis for RL, RCB, and ES
- Possible to separate combined small lamina/scrap

Acetone Floatation

- Filler from 18 cigarettes floated in 1L of acetone
- Floated and unfloated portions separated and dried
- Fractions are weighed
- Reported as Percent by Weight
- Routine method of analysis for ET

How long to pick, expertise.

30 min/cen
third

Whole Rod.
40 min.

5 hrs/day

Training

6 mos. - 4 yr.
Not just 1
comp.
Prn + Comp.

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EVALUATION OF ROD TO ROD VARIATION OF BLEND COMPONENTS

Test was designed to:

- A.** Determine the rod to rod variation of RL, RCB, ES, and ET in IM #14 cigarettes

- B.** Determine the variation in the methods

TEST DESIGN

- A. RL, RCB, and ES were separated under the microscope by two subjects

Each subject picked the same 10 cigarettes

In addition each cigarette was re-picked by one subject

Results recorded by each subject

- B. For ET, each subject evaluated 10 cigarettes from same population by the prescribed floatation method

Results recorded by each subject